

## **ABSTRACT**

**Aim:** The Aim of the study is to determine the prevalence of Microalbuminuria in newly diagnosed patients with Type 2 Diabetes Mellitus and to compare the effectiveness of Microalbuminuria with the fasting Lipid profile in detecting cardiovascular risk in these patients in terms of Atherogenic Index.

**Material &Methods:** The study group includes 247 patients with Type 2 Diabetes Mellitus. Patients with urinary tract infection, Macro albuminuria, Renal failure and Heart failure are excluded from the study. Fasting and post-prandial blood sugar, Fasting Lipid profile, Atherogenic Index, Creatinine and Urine Albumin are measured in all the patients. The patients were divided in to two groups: Group A, without Microalbuminuria and Group B, with Microalbuminuria.

**Results:** BMI, FBS, PPBS, Total Cholesterol, TGL, Atherogenic Index, Creatinine and Urine Albumin are found to be higher in Group B compared to Group A patients and Serum HDL is found to be lower in Group B compared to

Group A patients. Pearson correlation coefficient of Atherogenic Indices with Urine Albumin excretion of Group B patients shows that there is a significant positive correlation ( $r = 0.60$ ).

**Conclusion:** Microalbuminuria can be used as an independent marker for early prediction of cardiovascular complications and can be used as a screening procedure in all patients diagnosed with type 2 Diabetes mellitus.

**Keywords:** Type 2 Diabetes Mellitus, Lipid profile, Atherogenic index, Microalbuminuria, Cardiovascular disease.